REMARKS

Objection to the Oath/Declaration

The Examiner objected to the oath and declaration on the grounds that changes made by inventors Frank Polakovic and Charles Edwin Thorn in the previously submitted oath and declaration were not initialed and/or dated. Accordingly, new declarations signed by Mr. Polakovic and Mr. Thorn are submitted with this response.

Objection to the Drawings

The Examiner has also objected to the drawing on the grounds that top and bottom lines of the illustrated printed wiring board should be continuous, and has requested that a new drawing be submitted. A proposed replacement drawing accompanies this response. The proposed drawing provides the requested top and bottom lines, and also shows the sides of the through holes which would be evident in a cross-sectional view of the printed wiring board.

Objection to the Abstract

The Examiner has requested that the Abstract be amended to reflect the fact that the present claims are directed to a printed wiring board rather than a method of manufacturing a printed wiring board. Accordingly, the specification has been amended to include a new Abstract that is directed to a printed wiring board.

Status of the Claims

Claims 2-19, 21 and 22 have been presented for examination. Claim 2 has now been amended to more clearly point out the nature of the claimed recess in the printed wiring board, and the fact that the electrically conductive coating is adhered to the nonconductive surface forming the recess. In addition, claim 2 has been amended to clarify that the printed wiring board claimed is the printed wiring board before an electroplated layer is electroplated onto the

electrically conductive coating. Support for the amendments can be found at paragraphs 51 (describing adhesion of the coating to the nonconductive substrate), 91 (describing diameter ranges for the throughholes) and 90-98 (indicating resistance measurements are an indication of the conductivity of printed wiring boards prior to any electroplating). Accordingly, the amendments do not add new matter.

Rejection Under 35 U.S.C. § 103(a)

Claims 2-19, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Minten, U.S. Patent No. 4,684,560, in combination with Randolph, U.S. Patent No. 5,139,642 and Yoshida, U.S. Patent No. 5,150,283. With regard to claim 2, it is the Examiner's position that Minten discloses all of the features of the presently claimed printed wiring board, except that Minten does not explicitly disclose carbon having a mean particle size not greater than about 1 micron, and does not recite a water-dispersible organic binding agent. The Examiner has cited the Randolph patent as disclosing the use of small particle size carbon (0.5 to 3 microns), and has cited the Yoshida patent as disclosing a water-dispersible binding agent. It is the Examiner's position that it would have been obvious to use carbon having an average particle size not greater than 1 micron, as disclosed by Randolph, and an organic binding agent as disclosed by Yoshida to prepare the Minten printed wiring board and to thereby achieve the presently claimed printed wiring board.

The dependent claims 3-19 and 21-22, have been rejected as claiming process limitations that cannot distinguish claims to a product, or as claiming obvious properties for the printed wiring board. As set forth more fully below, the Examiner's rejection of the claims is respectfully traversed.